UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/888,336	06/22/2001	Robert E. Dvorak	BLFR 1004-1	7227

22470 7590 02/22/2008
HAYNES BEFFEL & WOLFELD LLP
P O BOX 366
HALF MOON BAY, CA 94019

EXAMINER	
VAN DOREN, BETH	
ART UNIT	PAPER NUMBER
3623	
MAIL DATE	DELIVERY MODE
02/22/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/888,336	DVORAK ET AL.	
	Examiner	Art Unit	
	BETH VAN DOREN	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 December 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-41,43-51 and 53-70* is/are pending in the application.

4a) Of the above claim(s) *1-35 and 64-70* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *36-41,43-51 and 53-63* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/05/07 has been entered.

Claims 36-39, 43-44, 55-61 have been amended. Claims 36-41, 43-51, and 53-63 are pending.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 36-39, 43-44, and 55-63 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 36 recites "simulating future inventory for the items [...]". It is not clear how this limitation relates to and effects the rest of the limitations of the claims. As currently recited, this limitation appears to not functionally interact with the remaining elements of the claim. Clarification is required.

Claim 53 recites "wherein future sales levels are corrected". It is not specifically clear what the scope of claim 53 is as it is not clear how future sales would be corrected. For

examination purposes, this claim has been construed as wherein future stock levels are corrected. Clarification is required.

Claim 62 recites "the simulated future sales". There is insufficient antecedent basis for this limitation in the claim. Clarification is required.

Claims 37-39, 43-44, and 52, 54-61 depend from claim 36 and therefore contain the same deficiencies.

Claim 62 depends from claim 36 and therefore contains the same deficiencies.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 36-41, 43-51, and 53-63 rejected under 35 U.S.C. 103(a) as being unpatentable over Garg (U.S. 6,044,357) in view of Landvater (U.S. 6,609,101).

As per claim 36, Garg teaches a computer-implemented method of evaluating the impact of inventory budgets on availability of items to meet projected future demand, including:

setting inventory budgets for groups of items (See column 3, lines 54-63, column 4, lines 4-10 and 48-60, column 5, lines 1-15, column 11, lines 63-67, column 12, lines 29-32, wherein funds and financing for inventory for categories of products is set);

projecting future demand for the items (See column 3, lines 20-32, column 4, lines 13-22, column 5, lines 39-55, column 10, lines 30-40, wherein demand is determined using demand forecasting for inventory);

scheduling simulated orders for the items in quantities sufficient to meet the projected future demand for the items unconstrained by the inventory budgets (See column 5, lines 39-51, column 6, lines 16-36, column 10, lines 32-41 and 60-63, column 12, lines 60-66, wherein simulated/estimated orders are determined mathematically to meet demand. See at least column 6, lines 65-67, which describes how cash on hand is not utilized in the consideration);

prorating the inventory budgets among the items, for a plurality of predetermined time periods (See column 3, lines 54-63, column 4, lines 4-10 and 48-60, column 5, lines 1-15, column 11, lines 63-67, column 12, lines 29-32, wherein future funds and money of the finance department is considered, divided proportionally amongst time frames); and

reporting open to buy values that compare the prorated inventory budgets for the items to inventory costs that would result from executing the simulated orders and delivers in quantities sufficient to meet the projected future demand (See column 3, lines 54-63, column 4, lines 4-10 and 48-60, column 5, lines 1-15, column 11, lines 63-67, column 12, lines 29-32, which disclose inventory funding and finances, as well as inventory costs (like carrying costs) that result from ordering and stocking products. See column 6, line 65-column 7, line 3, and column 13, lines 15-30).

However, Garg does not expressly disclose deliveries of items or simulating future inventory for the items, utilizing current inventory, the projected future demand, firm future deliveries and the simulated orders and deliveries.

Landvater teaches deliveries and simulating future inventory for the items, utilizing current inventory, the projected future demand, firm future deliveries and the simulated orders and deliveries (See column 5, lines 10-30, column 8, lines 15-40, column 14, lines 3-30, wherein future inventory is projected using current inventory, projected future sales, planned deliveries and deliveries that are set to occur).

Both Garg and Landvater are systems that consider finances and budget while managing inventory, wherein inventory is optimized based on considerations like cost, expected sales, etc. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the calculation of future inventory in the system of Garg in order to more efficiently calculate the costs associated with inventory and to increase the use of the data in cash planning for the company. See column 20, lines 35-48, of Landvater and column 5, lines 10-15, of Garg.

As per claim 37, Garg teaches calculating lost sales for the items based on the simulated orders and stock consistent with the prorated budget (See column 3, lines 54-63, column 4, lines 4-10 and 48-60, column 5, lines 1-15, column 11, lines 63-67, column 12, lines 29-32, wherein future funds and money of the finance department is considered, divided proportionally amongst time frames. See column 7, lines 1-10, wherein items not fulfilled from stock are backordered and lost). However, Garg does not expressly disclose deliveries or calculating reduced simulated orders for items consistent with the budget.

Landvater discloses deliveries and calculating reduced orders for items consistent with the budget (See column 4, lines 17-30, column 5, lines 1-15 and 35-47, column 11, lines 10-25, column 18, lines 1-5, wherein sales forecasts are corrected for holidays, promotions, and other events where sales are determined to be increased. The user is allowed to override a sales

forecast. Landvater also discloses corrected deliveries for lower sales frequency items. See column 10, lines 30-45 and 55-67, column 11, lines 30-50. These delivery plans are calculated consistent with inventory budgets. See column 20, lines 29-47, wherein the budgets are compared to the future inventory to determine projected inventory investment, useful for cash planning).

Both Garg and Landvater are systems that consider finances and budget while managing inventory, wherein inventory is optimized based on considerations like cost, expected sales, etc. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the reduction of orders consistent with the provided budget in the system of Garg in order to more efficiently calculate the costs associated with inventory and to increase the use of the data in cash planning for the company. See column 20, lines 35-48, of Landvater and column 5, lines 10-15, of Garg.

As per claims 38 and 39, Garg discloses simulated orders where items are ordered to fill inventory (See column 10, lines 50-67, column 12, lines 60-67, which discloses ordering items and fill rates). However, Garg does not expressly disclose deliveries and lead time associated with these stocking deliveries.

Landvater teaches deliveries, where deliveries are constrained by lead time for ordering and obtaining delivery of the items (See column 8, lines 25-40, and column 17, line58-column 18, line 3, wherein lead time is a consideration in replenishment).

Both Garg and Landvater are systems that consider finances and budget while managing inventory, wherein inventory is optimized based on considerations like cost, expected sales, etc. Garg specifically discloses ordering inventory and fill rates. Landvater discloses lead times

associated with deliveries of stock for refilling inventory. It would have been obvious to one of ordinary skill in the art at the time of the invention to include lead times in the order generation and inventory control system of Garg in order to more efficiently ensure that the stock on hand meets the given consumer demand at any period, thus more efficiently controlling inventory.

As per claim 40, Garg discloses projecting future demand for the items (See column 3, lines 20-32, column 4, lines 13-22, column 5, lines 39-55, column 10, lines 30-40, wherein demand is determined using demand forecasting for inventory). However, Garg does not expressly specify the time frame for performing the projections. Landvater discloses wherein the projected future demand for the items are projected on a daily or more frequent basis (See column 10, lines 20-30, wherein the future demand is stored on a daily basis).

Both Garg and Landvater are systems that consider finances and budget while managing inventory, wherein inventory is optimized based on considerations like cost, expected sales, etc. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the calculation of future inventory in the system of Garg in order to more efficiently calculate the costs associated with inventory and to increase the use of the data in cash planning for the company. See column 20, lines 35-48, of Landvater and column 5, lines 10-15, of Garg.

As per claim 41, Garg discloses projecting future demand and sales for the items (See column 3, lines 20-32, column 4, lines 13-22, column 5, lines 39-55, column 10, lines 30-40, wherein demand is determined using demand forecasting for inventory). However, Garg does not expressly specify the time frame for the simulations. Landvater discloses wherein the simulated future sales for the items are simulated on a daily or more frequent basis (See column 10, lines 20-30, wherein the future demand is stored on a daily basis).

Both Garg and Landvater are systems that consider finances and budget while managing inventory, wherein inventory is optimized based on considerations like cost, expected sales, etc. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the calculation of future inventory in the system of Garg in order to more efficiently calculate the costs associated with inventory and to increase the use of the data in cash planning for the company. See column 20, lines 35-48, of Landvater and column 5, lines 10-15, of Garg.

As per claims 43 and 44, Garg teaches wherein the simulated orders are based in part on optimal stocking levels (See column 7, lines 44-50, column 10, lines 30-45, wherein optimal levels are calculated). Garg does not expressly disclose deliveries. This is addressed above with respect to claim 36, with the same art and rationale applying to claims 43 and 44.

As per claims 45 and 46, Garg teaches wherein the simulated orders are based in part on optimal stocking levels (See column 7, lines 44-50, column 10, lines 30-45, wherein optimal levels are calculated). Garg does not expressly disclose and Landvater discloses reporting future inventory levels that exceed levels (See column 11, lines 25-50, wherein the user is told that the forecast for the product exceeds a forecast threshold).

Both Garg and Landvater are systems that consider finances and budget while managing inventory, wherein inventory is optimized based on considerations like cost, expected sales, etc. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the calculation of future inventory in the system of Garg in order to more efficiently calculate the costs associated with inventory and to increase the use of the data in cash planning for the company. See column 20, lines 35-48, of Landvater and column 5, lines 10-15, of Garg.

As per claims 47-48, Garg teaches reporting values of purchase orders that have been placed but not fulfilled and optimal stocking levels (See column 7, lines 44-50, column 10, lines 30-45, wherein optimal levels are calculated. See column 5, lines 39-51, column 6, lines 16-36, column 10, lines 32-41 and 60-63, column 12, lines 60-66, wherein purchase orders are calculated). However, Garg does not expressly disclose simulated future inventory levels exceeding optimal stocking levels.

Landvater discloses reporting the simulated future inventory levels that exceed the optimal stocking levels (See column 11, lines 25-50, wherein the user is told that the forecast for the product exceeds a forecast threshold).

Both Garg and Landvater are systems that manage inventory at the retail and distributor level, wherein inventory is optimized based on considerations like cost, expected sales, etc. It would have been obvious to one of ordinary skill in the art at the time of the invention to report values associated with purchase orders, such as the number of items ordered, in order to more accurately forecast for replenishment by including the values already ordered in the on-hand inventory. See column 5, lines 17-30, and column 14, lines 3-20, of Landvater that discusses this process.

As per claims 49-50, Garg teaches reporting values of purchase orders that have been placed but not fulfilled and optimal stocking levels (See column 7, lines 44-50, column 10, lines 30-45, wherein optimal levels are calculated. See column 5, lines 39-51, column 6, lines 16-36, column 10, lines 32-41 and 60-63, column 12, lines 60-66, wherein purchase orders are calculated). However, Garg does not expressly disclose values exceeding minimum order quantities having levels that exceed the optimal stocking levels.

Landvater discloses wherein delivery levels are consistent with minimum order quantities for the items (See column 8, lines 22-40, column 15, lines 25-40, column 16, lines 13-36, wherein group products and typical shipping quantities are considered).

However, Landvater does not expressly disclose minimum order quantities having levels that exceed the optimal stocking levels.

Both Garg and Landvater are systems that consider finances and budget while managing inventory, wherein inventory is optimized based on considerations like cost, expected sales, etc. Garg specifically discloses inventory control systems, ordering inventory, and fill rates. Landvater discloses minimum order quantities. Examiner takes official notice that minimum order quantities are old and well known in inventory scheduling and management and are considered when placing optimal orders. It would have been obvious to one of ordinary skill in the art at the time of the invention to include minimum order quantities in the finance and order considerations of Garg in order to more accurately consider all costs associated with inventory, such as minimum order quantity values, thus facilitating decisions concerning inventory.

As per claim 51, Garg teaches wherein the projected future demand levels are based in part on desired in stock service levels (See column 4, lines 1-20, column 5, lines 18-25 and 43-50, and column 11, lines 8-15, which disclose desired stock levels).

As per claim 53, Garg discloses where stock levels are corrected for stockouts at respective selling locations associated with the items (See column 7, lines 1-10, wherein items not fulfilled from stock are backordered and lost. Thus, this is considered in stocking calculations).

As per claims 54 and 55, Garg does not expressly disclose and Landvater discloses wherein the orders and deliveries are consistent with presentation quantities for the items at respective selling locations associated with the items (See column 14, lines 3-33 and line 65-column 15, line 6 and lines 15-25, wherein safety stock and delivery quantities are in line with presentations (shelf displays) at stores).

Both Garg and Landvater are systems that consider finances and budget while managing inventory, wherein inventory is optimized based on considerations like cost, expected sales, etc. Garg specifically discloses ordering items to meet demand of consumers, where not meeting demand and causing backorders can result in lost sales. Garg further discloses promotional campaigns and safety stock. Landvater discloses the importance of attractive displays in a retail environment. It would have been obvious to one of ordinary skill in the art at the time of the invention to consider presentation quantities when ordering inventory items in the system of Garg in order to more efficiently maintain enough safety stock to support an attractive display. See column 14, lines 35-45, of Landvater which disclose trying to maintain an attractive display.

As per claim 56 and 57, Garg discloses wherein the simulated orders are determined with reference to causal events (See column 4, line 48-column 5, line 25 and lines 39-54, which disclose events and causal demand). However, Garg does not expressly disclose and Landvater discloses deliveries and a causal calendar of events (See column 13, line 30-40, line 60-column 14, line 26, and column 17, lines 5-20, 30-40, and 57-67, wherein deliveries are based on a calendar of events, such as promotional dates and display changes, which are known in the system).

Both Garg and Landvater are systems that consider finances and budget while managing inventory, wherein inventory is optimized based on considerations like cost, expected sales, etc. Garg specifically discloses causal events. It would have been obvious to one of ordinary skill in the art at the time of the invention to include these events in a calendar in order to more efficiently organize the information for both the mathematically algorithms to follow, as well as for user comprehension.

As per claim 58 and 59, Garg discloses wherein the simulated orders take into account planned promotions (See column 4, line 48-column 5, line 25, wherein promotions, advertising, and pricing strategies are considered when making coordinate decisions). Garg does not expressly disclose deliveries. This is addressed above with respect to claim 36, with the same art and rationale applying to claims 58-59.

As per claim 60 and 61, Garg discloses inventory control systems and simulating orders to generate orders for items (See at least column 10, lines 40-65, column 12, lines 60-67). However, Garg does not expressly disclose and Landvater discloses wherein delivery levels are consistent with minimum order quantities for the items (See column 8, lines 22-40, column 15, lines 25-40, column 16, lines 13-36, wherein group products and typical shipping quantities are considered).

Both Garg and Landvater are systems that consider finances and budget while managing inventory, wherein inventory is optimized based on considerations like cost, expected sales, etc. Garg specifically discloses inventory control systems, ordering inventory, and fill rates. Landvater discloses minimum order quantities, minimum order quantities being old and well known in inventory scheduling and management. It would have been obvious to one of ordinary

skill in the art at the time of the invention to include minimum order quantities in the finance and order considerations of Garg in order to more accurately consider all costs associated with inventory, such as minimum order quantity values, thus facilitating decisions concerning inventory.

As per claims 62-63, Garg discloses prorating based on simulated future sales and taking into account any lost sales dies to stockouts for the item (See column 5, lines 39-51, column 6, lines 16-36, column 10, lines 32-41 and 60-63, column 12, lines 60-66, wherein future sales and demand are simulated/estimated mathematically. See column 3, lines 54-63, column 4, lines 4-10 and 48-60, column 5, lines 1-15, column 11, lines 63-67, column 12, lines 29-32, wherein future funds and money of the finance department is considered, divided proportionally amongst time frames. See column 7, lines 1-10, wherein items not fulfilled from stock are backordered and lost).

Response to Arguments

6. Applicant's arguments with respect to claims 36-41, 43-44, 47-51, and 53-63 have been considered but are moot in view of the new ground(s) of rejection.

7. Applicant's arguments with regards to Landvater (U.S. 6,609,101) have been fully considered, but they are not persuasive. In the remarks, applicant argues that as per claims 45-46, Landvater does not teach or suggest this limitation.

In response to this argument, Examiner respectfully disagrees. Newly applied Garg was relied upon, as set forth above, to teach optimal forecasted inventory levels. Landvater teaches in column 11, lines 25-50, where the user is told that the forecast for the product exceeds a

forecast threshold. This forecast is based on a model of the system, which makes projections about inventory demands. Thus, the user is informed when the situation occurs. Therefore, the combination of Garg in view of Landvater does teach and suggest the limitation.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Garg (U.S. 6,009,407) teaches calculating inventory service level replenishments and inventory control processes.

Ettl et al. (U.S. 6,078,900) teaches budgets for products and computing stock levels.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BETH VAN DOREN whose telephone number is (571)272-6737. The examiner can normally be reached on M-F, 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 571-272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/B. V.D./
February 14, 2008

/Beth Van Doren/
Primary Examiner, Art Unit 3623